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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/608,864

06/27/2003

Jee Fung Pang

30835/302623

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7590

05/15/2009

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EXAMINER

MIRZA, ADNAN M

ART UNIT

PAPER NUMBER

2445

MAIL DATE

DELIVERY MODE

05/15/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/608,864	Applicant(s) PANG ET AL.	
	Examiner ADNAN MIRZA	Art Unit 2445	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/11/2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The instant application having Application 10608864 has a total of 27 claims pending in the application; there is 4 independent claim and 23 dependent claims. The following action is response to applicant's response dated 12/11/2009.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bian et al (U.S. 7,509,656) and further in view of Shirley Moore, University of Tennessee-Knoxville "Using PAPI for Hardware Performance Monitoring on Linux Cluster".

As per claims Bian disclosed 1,9,17,25 a performance counter framework for rendering performance counter data in a computer system, the performance counter framework comprising: an application program interface comprising a set of functions including: a counter registration function called by the performance counter provider

application process to register a performance counter structure within an address space of the counter provider application process (col. 3, lines 11-17).

However Bian did not disclose in detail wherein the counter registration function registers an access function for retrieving performance counter data from the performance counter structure; and a counter query function called by the performance counter consumer application process to retrieve counter data from the performance counter structure within the address space of the counter provider application process by invoking the access function.

In the same field of endeavor Shirley Moore disclosed, "All Intel IA-64 processor implementations are to provide at least four performance counters and four performance counter overflow status registers [4]. Each counter can be configured to monitor events for any combination of privilege levels and one of several event metrics (Shirley Moore, University of Tennessee-Knoxville, Paragraph, 2.3 IA-64 counters)". Large applications with many hours of run time may require days or weeks of profiling in order to gather enough information on which to base a performance analysis (Shirley Moore, University of Tennessee-Knoxville, Paragraph, 1 Introduction).

It would have been obvious to one having ordinary skill in the art at the time of the invention was made to have incorporated All Intel IA-64 processor implementations are to provide at least four performance counters and four performance counter overflow

status registers[4]. Each counter can be configured to monitor events for any combination of privilege levels and one of several event metrics. Large applications with many hours of run time may require days or weeks of profiling in order to gather enough information on which to base a performance analysis as taught by Shirley Moore in the method and system of Bian to improve the collection of the performance data off the counters.

3. As per claims 2,10,18 Bian-Shirley Moore disclosed wherein the access function operates within the address space of the counter provider application process to retrieve the performance counter data from the performance counter structure (Shirley Moore, Paragraph. 8, Tools).

4. As per claims 3,11,19 Bian-Shirley Moore disclosed wherein the access function is a callback function (Shirley Moore, Paragraph. 2.1, IA-32 Counters).

5. As per claims 4,12,20 Bian-Shirley Moore disclosed wherein the registration function further supports specifying a data template describing the performance counter data (Shirley Moore, Paragraph. 2.1, IA-32 Counters).

6. As per claims 5,13,21 Bian-Shirley Moore disclosed wherein the application program interface includes a method for installing a description of the performance data

furnished by a provider associated with the performance counter provider application process (Shirley Moore, Paragraph. 8, Tools).

7. As per claims 6,14,22 Bian-Shirley Moore disclosed wherein the description of the performance data includes a performance counter data schema (Shirley Moore, Paragraph. 1, Introduction).

8. As per claims 7,15,23 Bian-Shirley Moore disclosed wherein the application program interface includes a method for requesting a block of data items to be created according to a specified dataset template (Shirley Moore, Paragraph. 8, Tools).

9. As per claims 8,16,24 Bian-Shirley Moore disclosed wherein the application program interface includes a method for providing a list. of registered datasets (Shirley Moore, Paragraph. 8, Tools).

10. As per claims 26 Bian-Shirley Moore disclosed performance counter provider application process for use in a performance counter system embodying a performance counter provider/consumer model, the performance counter provider comprising executable instructions for: requesting, via an application program interface, an operating system to allocate a memory space within the provider application process for a performance counter data structure (Shirley Moore, Paragraph. 1, introduction); storing performance counter information within the memory space; and providing

access by a registered callback function (Shirley Moore, Paragraph. 6, Statistical Profiling), invoked by a call to the application program interface, to the memory space containing the performance counter data structure (Shirley Moore, Paragraph. 8, Tools).

11. As per claim 27 Bian-Shirley Moore disclosed a performance counter system comprising: a performance counter provider; a performance counter consumer; and an operating system performance counter application program interface comprising a first set of functions callable by a performance counter provider application process to register the performance counter provider in a repository (Shirley Moore, Paragraph. 7, Accuracy Hardware Counter Data), and a second set of functions for serving requests originating from the performance counter consumer to enumerate and access the performance counter provider (Shirley Moore, Paragraph. 2.3, IA-64 Counters).

Response to Arguments

Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Adnan Mirza whose telephone number is (571)-272-3885.

13. The examiner can normally be reached on Monday to Friday during normal business hours. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571)-272-3933. The fax for this group is (703)-746-7239. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for un published applications is available through Private PAIR only. For more information about the PAIR system, see [Khan](#). Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866)-217-9197 (toll-free).

Adnan Mirza

/A. M. M./

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Examiner, Art Unit 2445

/Larry D Donaghue/

Primary Examiner, Art Unit 2454